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3019

JUN 05 2000

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0750-00

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF CHANGE PAGES TO THE CERTIFICATION DESIGN LETTER FOR AREA 1, PHASE II CERTIFIED FOR REUSE AREAS, TRAP RANGE, SECTOR 2C, AND SECTOR 3

Enclosed are change pages to the Certification Design Letter (CDL) for Area 1, Phase II Certified for Reuse Areas, Trap Range, Sector 2C and Sector 3. The changes to this CDL describe the recertification of portions of two contiguous certification units in the Trap Range, which originally failed certification because of lead and/or arsenic concentrations. Recertification will commence after treatment of a lead "hot spot" and subsequent 6-inch, 0.4-acre excavation.

If you have any questions or require additional information, please contact Robert Janke at (513) 648-3124.

Sincerely,

for Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:R. J. Janke

Enclosure

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cc w/enclosure:
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S. Lorenz, Fluor Fernald, Inc./52-5
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3019

CERTIFICATION DESIGN LETTER FOR AREA 1, PHASE II, CERTIFIED FOR REUSE AREAS, TRAP RANGE, SECTOR 2C, AND SECTOR 3

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

JUNE 2, 2000

U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

20710-RP-0014
REVISION 0
PCN 2

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REVISION SUMMARY

Revision	Date	Description of Revision
Rev. 0	2/11/00	Initial controlled issuance
PCN 1	4/7/00	Revised Figure 1-6 to remove shading within CU boundaries for S2-OS-01 and S2-LL-02
PCN 2	6/2/00	Revised the Executive Summary, Sections 1, 3, 4, and 5 and added Figures 1-7 and 1-8 to include additional information regarding recertification of portions of CUs A1P2-S1TR-01 and A1P2-S1TR-03 for lead and arsenic as a separate CU

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EXECUTIVE SUMMARY

This Certification Design Letter (CDL) describes the certification approach for Area 1, Phase II (A1PII) Certified Areas for Reuse, Trap Range, Sector 2C, and Sector 3, and includes the following information:

- A definition of the boundaries of the area to be certified under this CDL
- A discussion of the area-specific constituents of concern (ASCOC) selection process and list of ASCOCs
- A presentation of the certification unit (CU) boundaries and proposed sampling strategy
- The analytical requirements and the statistical methodology that will be employed
- The proposed schedule for certification activities.

The scope of this CDL is limited to the certification of the remaining areas in A1PII. These areas include the Trap Range, the certified for reuse areas, remaining areas in Sector 2, and the entire Sector 3 area which includes the former Sewage Treatment Plant (STP) and surrounding areas. The certification design presented in this CDL follows the general approach outlined in Section 3.4 of the Sitewide Excavation Plan (SEP, DOE 1998a). The subject areas are well characterized through several predesign investigation and precertification sampling programs. The selection process for the ASCOCs was accomplished using constituent of concern (COC) lists in the Operable Unit 5 (OU5) Record of
PCN 2 Decision (ROD, DOE 1996), predesign investigation data, and process knowledge. A total of 64 CUs were established, 15 in Sector 1, 21 in Sector 2, and 28 in Sector 3.

1.2 SCOPE

The scope of this CDL consists of certifying the remaining areas in A1PII including the Trap Range,
PCN 2 the Certified for Reuse Areas, Sector 2C, and Sector 3, as shown in Figures 1-6, 1-7, and 1-8. This includes a total of 64 CUs: 15 in Sector 1, 21 in Sector 2, and 28 in Sector 3. This CDL also includes CUs that surround the northern portion of the Permanent Leachate Line within Area 1, Phase I (A1PI) and the location of the CU surrounding the southern section of the Permanent Leachate Line presently under design. Additionally, a CU has been designed that surrounds the abandoned Temporary Leachate Line footprint. The CU design is shown in Figure 1-6, and a description of each CU is
PCN 2 provided in Section 4.1. Figure 1-7 sample point locations and Figure 1-8 shows the CU boundary for CU A1P2-S1TR-12 which was created to recertify portions of two contiguous CUs which initially failed certification because of a lead "hot spot" and arsenic concentrations.

Three areas within A1PII are excluded from this certification scope: the Dissolved Oxygen Facility, the Interim Leachate Line area, and the area north of the footprint of the West Impacted Material Stockpile. These areas are shaded in Figure 1-6 and are explained in the following paragraphs.

The first area excluded is the Dissolved Oxygen Facility which will remain in operation until final remediation activities are completed at the FEMP. This area will be certified as part of Area 10.

The second area excluded is the Interim Leachate Line area. This area will be certified beginning in Spring 2001 after the Permanent Leachate Line is installed and operational.

The final area excluded from this CDL is an area located north of the West Impacted Material Stockpile footprint. This area is currently being used to support OSDF placement activities, which consists of the Equipment Wash Facility, construction trailers, and the Debris Haul Road. This area will be certified in late 2000 after the Equipment Wash Facility and construction trailers are relocated. Additionally, the area directly north of and adjacent to the Equipment Wash Facility in A1PI will be recertified.

TABLE 1-1
A1PII CERTIFICATION DESIGN LETTERS

CDL Scope	CDL Submittal	Certification Report
Sector 1, Sector 2A, Conveyance Ditch	Complete	Complete
Sector 2B	Complete	Complete
Sector 3 Utility Trenches	Complete	Results to be included with Draft Final Certification Report

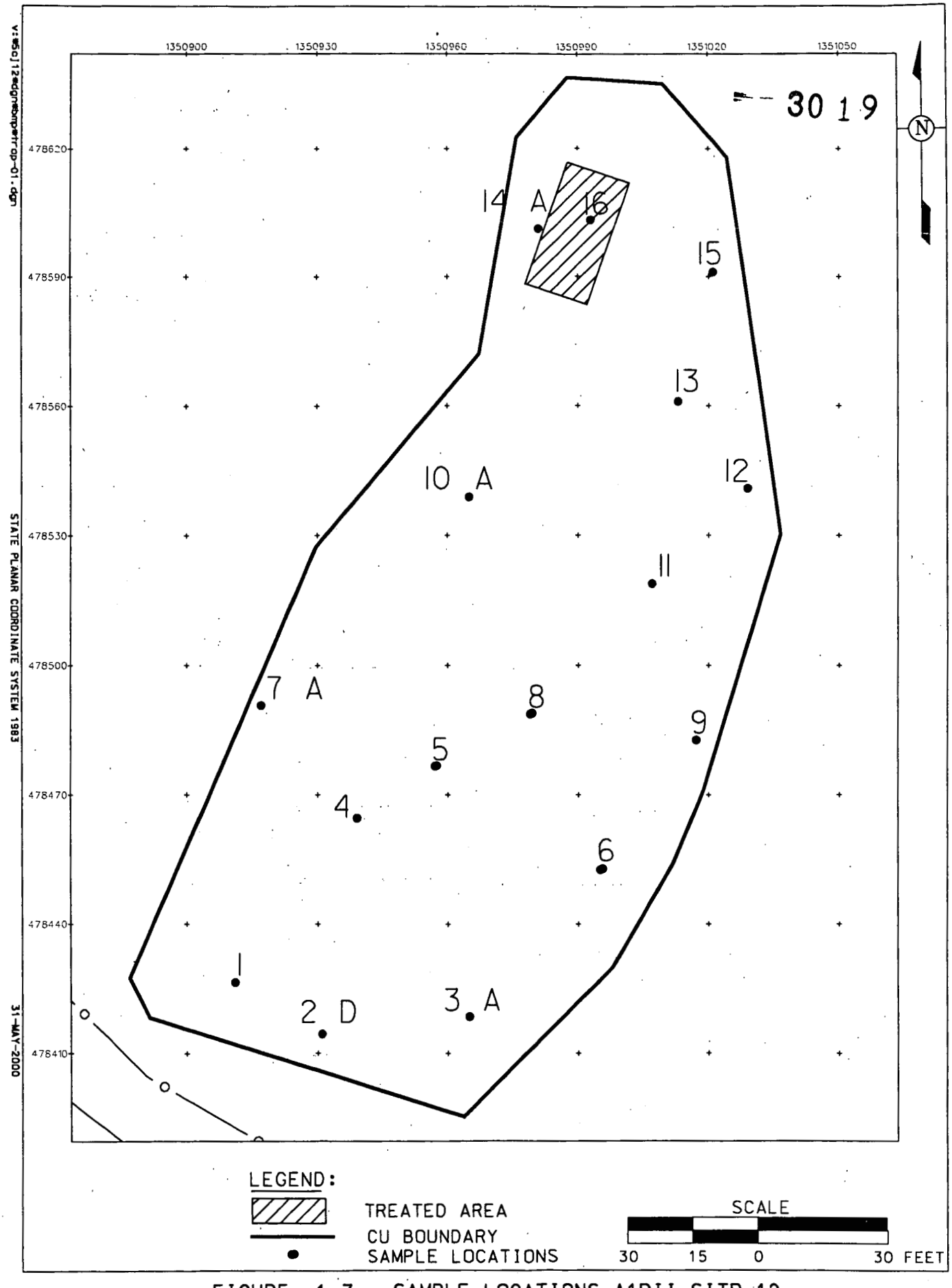

FIGURE 1-7. SAMPLE LOCATIONS A1PII-SITR-12

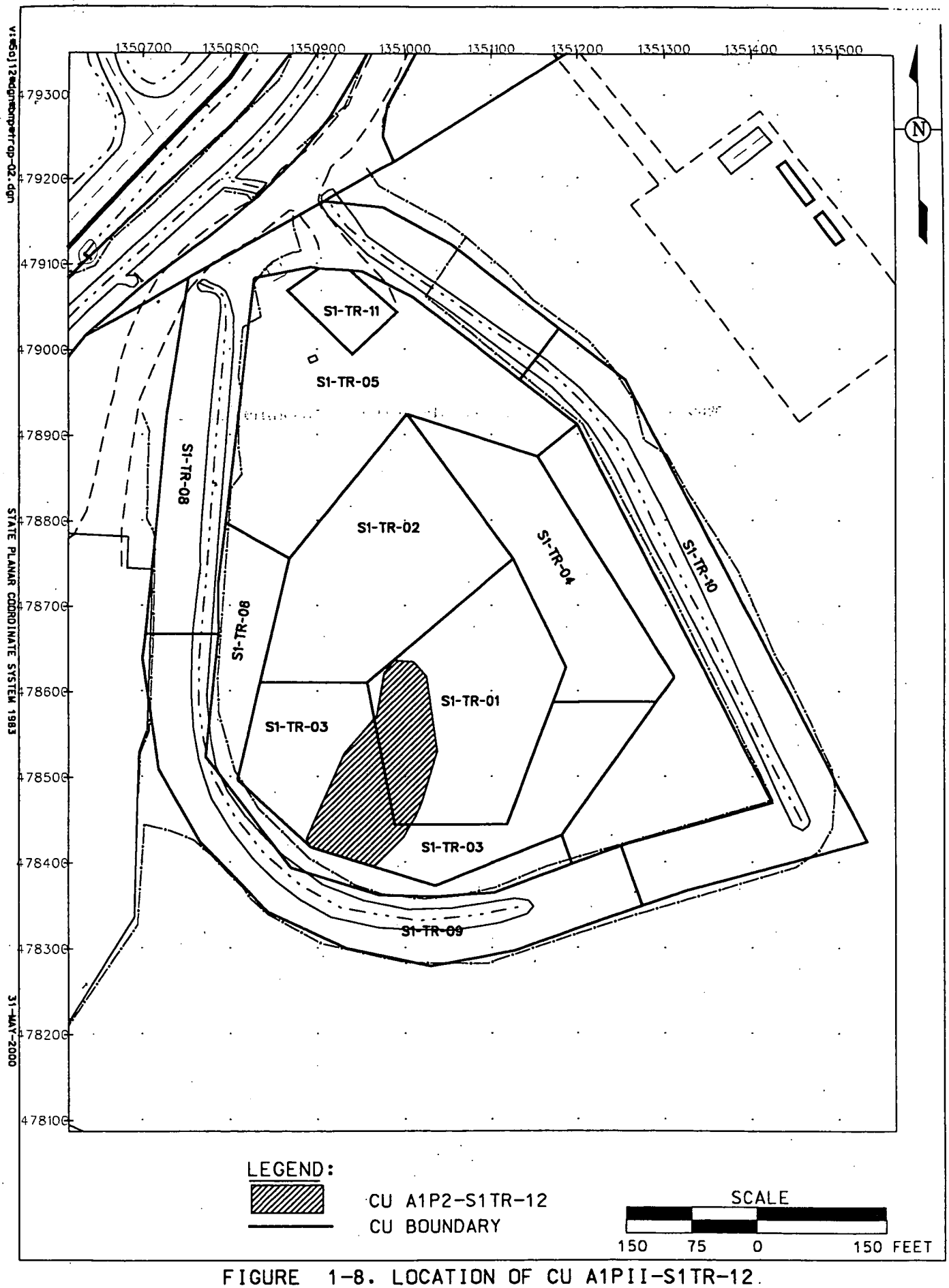

FIGURE 1-8. LOCATION OF CU A1PII-S1TR-12.

3.0 AREA-SPECIFIC CONSTITUENTS OF CONCERN

In the OU5 ROD, there are 80 soil COCs with established FRLs which were retained for further investigation based on a screening process that considered the presence of the constituent in site soil and the potential risk to a receptor exposed to soil containing this contaminant. In spite of the conservative nature of this COC retention process, many of the COCs with established FRLs have a limited distribution in site soil or the presence of the COC is based on high Contract Required Detection Limits (CRDLs). When the FRLs were established for these COCs in the OU5 ROD, they were initially screened against site data presented on spatial maps to establish a picture of potential remediation areas.

By reviewing existing Remedial Investigation/Feasibility Study data presented on spatial distribution maps, the sitewide list of soil COCs was reduced from 80 listed in the OU5 ROD to 30. This reduction was possible because the majority of the COCs with FRLs listed in the OU5 ROD have no detections on site above their corresponding FRL, thus eliminating them from further consideration. The 30 remaining sitewide COCs account for over 99 percent of the combined risk to a site receptor model, and they comprise the list from which all of the remediation ASCOCs are drawn. When planning certification for a remediation area, additional selection criteria are used to derive a subset of these 30 COCs. This subset of COCs is used in the certification process.

3.1 SELECTION CRITERIA

The selection process for retaining ASCOCs for a remediation area is driven by applying a set of decision criteria. A soil contaminant will be retained as an ASCOC if:

- It is listed as a soil COC in the OU5 ROD
- It can be traced to site use, either through process knowledge or known release of the constituent to the environment
- Analytical results indicate the contaminant is present at a concentration above its FRL, and the above-FRL concentrations are not attributable to false positives or elevated CRDLs
- Physical characteristics of the contaminant, such as degradation rate and volatility, indicate it is likely to persist in the soil between time of release and remediation

- The contaminant is one of the sitewide primary COCs (total uranium, radium-226, radium-228, thorium-232, and thorium-228)
- Using this process, the ASCOCs for the were identified and are listed in Tables 3-1 and 3-2.

PCN 2 One exception to the process above is CU A1P2-S1TR-12 which includes portions of CUs A1P2-S1TR-01 and A1P2-S1TR-03 which failed for lead and arsenic. Both CUs passed for radiological constituents and these will not be reanalyzed when CU A1P2-S1TR-12 is recertified for metals (arsenic and lead).

PCN 2

- The 0.4-acre area which includes portions of two CUs (A1P2-S1TR-01 and A1P2-S1TR-03) which failed for lead and arsenic. The excavation removed the top 6 inches of soil including the lead "hot spot" measuring 30 feet by 15 feet by 3 inches deep which was retreated by the stabilization contractor on May 22, 2000.

Sedimentation Basin and Outfall Area: During the certification of A1PII Sector 1, Sector 2a, and the Conveyance Ditch several areas were certified for reuse. Three of these areas are within Sector 1, the trap range run-on and run-off ditches (CUA1PII-S1-19), sedimentation basin (A1PII-S1-03) and the outfall (A1PII-S1-01) area.

As shown on Figure 4-1, the following CUs are located in Sector 1:

- A1P2-S1TR-01 - Represents the location of the stabilization of Trap Range soils at 10 and 12-inch depths prior to excavation
- A1P2-S1TR-02 - Represents the remaining stabilized soils at a 6-inch depth, a portion is along its northwest boundary was stripped of soil in which stabilization was not necessary but broken sheet clay pigeons were found
- A1P2-S1TR-03 - Represents the remaining stabilized soils at a 6-inch depth
- A1P2-S1TR-04 - Represents the remaining stabilized soils at a 6-inch depth
- A1P2-S1TR-05 - Portion of the non-stabilized, non-excavated portion of the Trap Range
- A1P2-S1TR-06 - Portion of the non-stabilized, non-excavated portion of the Trap Range
- A1P2-S1TR-07 - Portion of the non-stabilized, non-excavated portion of the Trap Range
- A1P2-S1TR-08 - Portion of the Trap Range run-on and run-off control ditches. Part of the final certification of CU A1PII-S1-19 that was certified for reuse
- A1P2-S1TR-11 - Footprint of lead stabilization and excavation area in north part of Trap Range

PCN 2

- A1P2-S1TR-12 - Remedial actions will be conducted on portions of two contiguous CUs which failed. CU A1P2-S1TR-01 failed because of a lead "hot spot" at location 09 and CU A1P2-S1TR-03 failed for arsenic concentrations. The "hot spot" will be treated by the stabilization contractor (an area measuring 30 feet by 15 feet by 3 inches deep) and upon passing TCLP criteria for lead, approximately 0.4 acres including the "hot spot will be excavated to a depth of 6 inches. Sampling results from areas within the CUs, but outside this 0.4-acre excavation area pass certification criteria and are considered certified. The excavation area forms the boundary of this CU. The CU is shown on Figure 1.7.

- A1P2-S1TR-09 - Portion of the Trap Range run-on and run-off control ditches. Part of the final certification of CU A1PII-S1-19 that was certified for reuse

- A1P2-S1TR-10 - Portion of the Trap Range run-on and run-off control ditches. Part of the final certification of CU A1PII-S1-19 that was certified for reuse

- A1P2-S1SB-01 - Portion of CU A1PII-S1-03 that was certified for reuse prior to the construction of the sedimentation basin. This portion of the CU is the area that is above the maximum designed high water limit in the sedimentation basin

- A1P2-S1SB-02 - Portion of CU A1PII-S1-03 that was certified for reuse prior to the construction of the sedimentation basin. This portion of the CU is the area that is below the maximum designed high water limit in the sedimentation basin

- A1P2-S1OF-01 - This CU is the final certification of a portion of the certified for reuse CU A1PII-S1-01. The area of this CU is smaller than the original A1PII-S1-01 CU. The area of the current CU is the location of the water flow from the A1PII sedimentation basin, which is the area most likely to exceed FRL. Once the A1PII-S1OF-01 is certified, the entire certified for reuse area A1PII-S1-01 will be determined to be certified.

Note: Even though the original certified for reuse A1PII-S1-19 was considered a Group 2 CU, the final certification of this CU will be done in three CUs since the area is now considered a Group 1 CU

4.1.2 Sector 2 - Certification Units

The primary excavation approach with in Sector 2 was Approach A, and the following considerations were used in CU design:

Sedimentation Basins: Several sedimentation basins exist within the Sector 2 area, and each were treated as Group 1 CUs. These sedimentation basins include the West Impacted Material Stockpile Basin, the OSDF Sediment Basin, and the abandoned clean sedimentation basin the northeast portion of Sector 2.

Stockpile Footprints: Several stockpiles were located in Sector 2 including OSD-007 - A1PI Debris Stockpile, the West Impacted Material Stockpile, the East Impacted Soil and Debris Stockpile, and the West Debris Stockpile. These stockpile footprints were used to determine Group 1 CU boundaries.

Leachate Line: Both the Interim and the Temporary Leachate Line were considered in the design the CUs. The Interim Line was used as the western border of Sector 2, and the original Temporary Leachate Line was considered its own CU.

As shown on Figure 4-2, the following CUs are located in Sector 2:

- A1P2-S2NI-01 – Non-impacted area between certified former North Access Road and other structures including OSD-007 footprint, and the Sedimentation Basin
- A1P2-S2NI-02 – Non-impacted area bordering the Former Production Area fenceline and the sedimentation basin
- A1P2-S2NI-03 – Non-impacted area which contains footprint of former OSDF contractor support area
- A1P2-S2NI-04 – Non-impacted area north of former contractor support area and south of A1PI Sedimentation Basin
- A1P2-S2NI-05 – Non-impacted south of Borrow Area Haul Road and north of relocated North Access Road
- A1P2-S2NI-06 - Non-impacted area bordering East Impacted Stockpile footprint and former North Access Road
- A1P2-S2NI-07 - Non-impacted area bordering the Former Production Area fenceline and the Sedimentation Basin
- A1P2-S2NI-08 - Non-impacted area adjacent to OSD-007 footprint and west side of the A1P2 boundary
- A1P2-S2SP-01 - Excavated footprint of West Impacted Material Stockpile
- A1P2-S2SP-02 - Area around the excavated footprint of West Impacted Material Stockpile
- A1P2-S2SP-03 - Excavated footprint of remaining East Impacted Stockpile and Debris Pile
- A1P2-S2SP-04 – Excavated footprint of OSD-007 Stockpile

- A1P2-S2SA-01 – Area east former North Access Road which includes two small triangle stripping areas
- A1P2-S2SB-01 – Footprint of "S" shaped Sedimentation Basin
- A1P2-S2SB-02 - Footprint of non-certified abandoned sedimentation basin
- A1P2-S2SB-03 - A1PI Sedimentation Basin
- A1P2-S2SB-04 - Sediment Basin south of former location of West Impacted Material Stockpile
- A1P2-S2HR-01 - Portion of the Borrow Area Haul Road in the non-certified area
- A1P2-S2LL-01 - The abandoned Temporary Leachate Line footprint
- A1P2-S2LL-02 - The southern section of the Permanent Leachate Line to be installed
- A1P2-S2OS-01 - Excavated footprint of the A1PI West Debris Stockpile and surrounding area. This CU is being certified for reuse. Within this CU, a Permanent Leachate Line from Cell 3 will be extended including installation of a permanent manhole. Because adjacent areas will continue to be used by OSDF this CU will require recertification.

4.1.3 Sector 3 - Certification Units

The excavation approaches within Sector 3 include Approach A, D and E, and the following considerations were used in CU design:

Stripping Areas: Adjacent to the STP approximately 40 acres were stripped 6 inches. Boundaries were often defined by these Group 1 CUs.

Haul and Access Roads: Several Haul and Access Roads exist within Sector 3. These roads include the STP Access Road, the STP Haul Road, and the Borrow Area Haul Road. Each road was treated as its own Group 1 CU.

Deep Excavation Areas: In the former STP area several deep excavations occurred. These areas we used to determine these Group 1 CU boundaries.

FRL Limits: The STP area has two FRLs for total uranium. The east side of the STP has a FRL of 82 μg/kg for total uranium, the west side has a FRL of 20 μg/kg.

Non-Impacted Areas: Several areas based on predesign and precertification data did not require any remedial actions. These areas are considered Group 2 CUs, with a maximum area of 250,000 square feet. In Sector 3 these areas are located south of the former STP plant, and adjacent to the Access Road.

Hazardous Waste Management Unit Areas: Within the former STP area the Sludge Drying Beds are considered a HWMU. As required by the SEP, the HWMU footprint will contain at the minimum eight samples.

Stockpile Footprints: Stockpile NAR-007 footprint is located in Sector 3. The footprint and adjacent stripping area was used to form a Group 1 CU.

Removal Action 14: The footprint of the excavations performed during RA14 activities were considered in the design of the CUs. Two Group 1 CUs cover the affected area.

As shown on Figure 4-2, the following CUs are located in Sector 3:

- A1P2-S3CD-01 – Southern portion of the Conveyance Ditch which includes riprap where the water flowed through into the Sediment Basin. This CU was previously certified. Therefore, the CU is greater than 250 feet by 250 feet but less than 500 feet by 500 feet
- A1P2-S3CD-02 – Northern portion of the Conveyance Ditch
- A1P2-S3NI-01 – Southern non-impacted area between North Access Road and Conveyance Ditch
- A1P2-S3NI-02 – Non-impacted area between North Access Road and Conveyance Ditch
- A1P2-S3NI-03 – Non-impacted area south of the stripping area
- A1P2-S3NI-04 – Non-impacted area
- A1P2-S3NI-05 – Non-impacted area south of STP
- A1P2-S3NI-06 – Non-impacted area north of stripping area and south and North Access Road
- A1P2-S3NI-07 – Ditch line along relocated North Access Road
- A1P2-S3HR-01 – Southern area of Borrow Area Haul Road
- A1P2-S3HR-02 – Current STP and Contractor Support Area Access road
- A1P2-S3HR-03 – Northern portion of Borrow Area Haul Road
- A1P2-S3HR-04 – STP Haul Road
- A1P2-S3HR-05 – Portion of non-certified relocated North Access Road
- A1P2-S3SA-01 – Southwest portion of stripping area disturbed by trenches

- A1P2-S3SA-02 - Portion of stripping area bordering southwest corner of STP
- A1P2-S3SA-03 - Western portion of stripping area bordering Borrow Area Haul Road
- A1P2-S3SA-04 - Portion of stripping area bordering west STP boundary
- A1P2-S3SA-05 - Northwest portion of stripping area
- A1P2-S3SA-06 - Northern portion of stripping area
- A1P2-S3SA-07 - Northeastern portion of stripping area
- A1P2-S3SA-08 - Northeastern portion of stripping area
- A1P2-S3SA-09 - Portion of stripping area north of STP border, contains RA14 excavation footprint
- A1P2-S3SA-10 - Most northern portion of the stripping area contains removed stockpile NAR-007 footprint
- A1P2-S3SA-11 - Portion of stripping area north of STP border, contains RA14 excavation footprint
- A1P2-S3DP-01 - Western portion of the deep excavation footprint within the STP area, also a 20 μg/kg total uranium FRL area
- A1P2-S3DP-02 - Eastern portion of the deep excavation footprint within the STP area, excluding the Sludge Drying Beds. This area is an 82 μg/kg total uranium FRL area
- A1P2-S3HW-01 - Includes footprint of HWMU Sludge Drying Beds and adjacent areas.

4.2 SAMPLING

As discussed in the PSP for Certification Sampling of A1PII Certification of Certified for Reuse Areas, Trap Range, Sector 2C, and Sector 3 (DOE 1999c), sample locations were generated by dividing each CU into 16 approximately equal sub-CUs, then randomly selecting northing and easting coordinates within each sub-CU boundary. All 16 locations will be sampled for CUs A1P2-S2LL-01 and A1P2-S3HW-01. For the remaining CUs, certification samples will be collected at 12 of the randomly selected locations and the remaining four locations will be used as alternates in the event that surface or subsurface obstacles prevent sample collection at any of the original locations. All samples will be collected 0 to 6 inches in native soil.

Sample point locations are shown on Figures 4-1 and 4-2.

Exceptions to the process above include:

- CU A1P2-S2LL-01 - Samples will be collected at depth beneath the leachate line bedding in the top 6 inches of undisturbed, native soil. This area beneath the Temporary Leachate Line is suspect because leaking may have occurred from the line. Samples collected and analyzed during the leak investigations revealed no results exceeding the FRLs. However, 16 samples will be collected and analyzed for this CU. The fill area and the leachate line will be excavated. This area will be sampled for waste acceptance criteria (WAC) concerns separate from the certification sampling and will be done with a Variance/Field Change Notice (V/FCN) to the A1PII for Field Sampling of Miscellaneous Areas (DOE 1997b). The top 6 inches will be collected and analyzed for WAC and a 6-inch archive sample will be collected at the bottom of the fill material.

- CU A1P2-S3HW-01 - This CU encompasses the footprint of the sludge drying beds, HWMU 41. A total of 16 samples will be collected and analyzed in this CU with eight sample points located within the footprint of the HWMU area.

- CUs A1P2-S3SA-08 - A CG&E tower is located in this CU in the 6-inch stripping area. The area under the tower was not accessible for stripping. As agreed verbally with OEPA, two additional samples will be collected there to ensure that the area meets FRL. These results will not be used to determine if the CU passes the statistical criteria for CU pass/fail conditions. If either of the two samples collected under the CG&E tower exceed FRL limits, the area will be excavated and resampled. A HPGe detector shot was taken under the tower during precertification activities. The results for total uranium and thorium-232 were below the FRL limits, however, the result for radium-226 was 1.9 pCi/g, just above the 1.7 pCi/g FRL.

- CUs A1P2-S2HR-01, A1P2-S3HR-01, A1P2-S3HR-02, and A1P2-S3HR-03 - These CUs contain sections of various haul or access roadways. Samples will be collected in the top 6 inches of undisturbed, native soil beneath the roads and any subgrade materials or disturbed support materials.

- CUs A1P2-S3SA-09 and A1P2-S3SA-11 - During RA14, spot excavations were performed in locations within these CUs which removed between 6 and 18 inches of soil. The RA14 Contaminated Soils Adjacent to the STP Incinerator Final Report (DOE 1994) notes that the off-property excavations were backfilled, however, the on-property excavation areas were not backfilled. Additionally, another 6 inches of soil was removed from these areas during STP remediation activities. Precertification realtime scanning, as well as additional analyses of physical samples, show no areas which exceed the FRL. Samples will be collected and analyzed at two intervals (0 to 6-inch and 6 to 12-inch) in all 16 locations for these CUs. Statistical analyses of the analytical data will be performed for each depth interval separately. If results from either set of data fails, a plan for removal of the impacted material and resampling will be developed and implemented upon approval of the Regulatory Agencies.

- CU A1P2-S3HR-05 - This CU contains a section of the north access roadway. Prior to onset of roadway construction, samples were collected from the top 6-inch interval of undisturbed soil. This 6-inch interval was stripped and the excavated soil was placed in stockpile NAR-007. Analytical results of the excavated soil were below-FRL as reported in the Area 1 Stockpile Inventory and WAC Attainment Report (DOE 1998f). The roadway base was constructed using cut and fill excavation and no foreign fill material was required. Certification samples will be collected in the top 6-inch interval of soil directly beneath the pavement and gravel sub-base.

PCN 2

- A1P2-S1TR-12 – This CU contains an excavation area of approximately 0.4 acres. Prior to excavation, a lead "hot spot" was treated by a stabilization contractor. One sample location was biased to fall within the 15-foot by 30-foot area where the treatment was conducted.

4.3 ANALYTICAL METHODOLOGY AND STATISTICAL ANALYSIS

Laboratory analysis of certification samples will be conducted using an approved analytical method, as discussed in Appendix H of the SEP. Analyses will be conducted to either Analytical Support Level (ASL) D or E. All requirements for ASL E are the same as ASL D except the minimum detection level for the selected analytical method must be at least 10 percent of FRL. All results will be validated to ASL B and a minimum of ten percent (seven of the 63 CUs) of the results will be validated to ASL D. The CUs to be validated to ASL D were randomly selected, and all analytes will have 10 percent validated. Samples rejected during this validation will be re-analyzed, or an alternate sample may be collected and substituted if there is insufficient material available from the initial sample. If any sample fails this validation, all data from the laboratory with the rejected result will then be validated to determine the integrity of all data from that laboratory. Once data are validated, results will be entered into the Sitewide Environmental Database (SED), and a statistical analysis will be performed to evaluate the pass/fail criteria for the each CU. The statistical approach is discussed in Section 3.4.3 and Appendix G of the SEP.

Two criteria must be met for the CU to pass certification. If the data distribution is normal or lognormal, the first criterion compares the 95 percent Upper Confidence Limit (UCL) on the mean of each primary COC to its FRL. On an individual CU basis, any ASCOC with the 95 percent UCL above the FRL results in that CU failing certification. If the data distribution is not normal or lognormal, the appropriate nonparametric approach discussed in Appendix G of the SEP will be used to evaluate the second criterion. The second criterion is related to individual samples. An individual sample cannot be greater than two times the FRL or three times the FRL, based on its size (see Figure 3-11 of the SEP for further details). When the given UCL on the mean for each COC is less

than its FRL, and the two times FRL hot-spot criterion is met, the CU has met both criteria and will be considered certified.

There are three conditions that could result in a CU failing certification: 1) high variability in the data set, 2) localized contamination, and 3) widespread contamination. Details on the evaluation and responses to these possible outcomes are provided in Section 3.4.5 of the SEP. When all CUs within the scope of this CDL have passed certification, a certification report will be issued.

This CDL will result in two certification reports. The first report will consist of the CUs west of the old North Access Road which are time critical for OSDF work to install the Permanent Leachate Line in the Calendar Year 2000, which includes the following CUs:

- A1P2-S2SP-01
- A1P2-S2SP-02
- A1P2-S2SP-04
- A1P2-S2SB-01
- A1P2-S2SB-02
- A1P2-S2SB-04
- A1P2-S2NI-01
- A1P2-S2NI-02
- A1P2-S2NI-07
- A1P2-S2NI-08
- A1P2-S2LL-01
- A1P2-S2LL-02
- A1P2-S2OS-01

Therefore, it is within these CUs that the sampling and analysis will focus once field activities commence.

The second report will include all the remaining CUs shown in this CDL, which are east of the North Access Road and including the certification from the Utility Trench CDL (DOE 1999d). The certification reports will be submitted to the Regulatory Agencies to receive acknowledgment that the pertinent operable unit remedial actions were completed and the individual CUs are certified to be released for interim or final land use. Section 7.4 of the SEP provides additional details and describes the required content of the certification reports.

5.0 SCHEDULE

The following draft schedule shows key activities for the completion of the work within the scope of this CDL.

PCN 2

ACTIVITY	TARGET DATE
Submittal of Certification Design Letter	October 31, 1999
Start of Field Work	November 15, 1999
Submittal of Final A1P2-S2LL-02 Design (southern section of Permanent Leachate Line)	November 19, 1999
Complete Field Work	February 29, 2000
Complete Analytical Work	March 31, 2000
Complete Data Validation and Statistical Analysis	April 30, 2000
Submit Certification Report* (CUs west of North Access Road)	February 1, 2000*
Submit Certification Report* (CUs east of North Access Road)	May 31, 2000*
Submit Revised Certification Report (including CU A1P2-S1TR-12)	August 7, 2000

* Only these dates for submittal of the CDL and Certification Report are commitments to the EPA and OEPA. Other dates are internal target completion dates. The Certification Report for CUs west of the old North Access Road are necessary to begin OSDF Permanent Leachate Line installation.